REMARKS

The remarks presented herein are believed to be fully responsive to the Office Action. Claims 21-25 and 27-35 are pending in the present application. The independent claims recited by the present application are claims 21 and 35.

Examiner Interview Summary: Attorney (Changhoon Lee) for the Applicant conducted a telephonic interview with Examiner (Nathan C. Uber; hereinafter referred as to the "Examiner") regarding the present application and the Office Action on November 20, 2008.

With regard to the "teaching away" reference, Attorney argued that a reference would teach away if a person of ordinary skill, upon reading the reference, is discouraged from following the path set forth in the reference. Attorney also cited Federal Circuit's precedents on the issue of "teaching away." However, Examiner asserted that a reference would teach away only if the cited reference makes the claimed invention inoperable. Attorney pointed out the Federal Circuit precedents and argued that Cheung '471 teaches away from awarding free advertising of the claimed invention because it discourages awarding free advertising. However, the Examiner stated that he would not consider the case law because he cannot access to case law database, such as LexisNexis and he only considers the Manual of Patent Examining Procedure (MPEP).

With regard to the analogousness of the McAfee reference, Attorney argued that the McAfee reference is non-analogous art, cited Federal Circuit precedents and applied two part test. However, the Examiner did not agree with Attorney's position for the reason that he could use non-analogous art for non-structural common sense concepts.

The following are remarks were presented to the Examiner in draft form prior the interview:

The Office Action states that claims 21-35 stand rejected under 35 U.S.C. 103(a), as being unpatentable over Cheung et al. (U.S. Patent No. 7,043,471)(hereinafter "Cheung '471") in view of the article *Bidding for Contracts: A Principal-Agent Analysis* by R. Preston McAfee and John McMillan (hereinafter referred to as "McAfee reference").

Claim 21

21. A method for managing advertiser's account in keyword advertisement, the method comprising the steps of:	
(a)	generating a predicted expense associated with a search word for a first advertising period based, at least in part, upon statistical data of prior actual clicks for a predetermined advertising period, the predicted expense being associated with expected clicks and a unit click cost associated with the search word;
(b)	providing to an advertiser over a network the predicted expense for the first advertising period;
(c)	**upon receipt of a request for advertising from the advertiser, setting up the predicted expense as an account limit for the first advertising period**
(d)	maintaining a search information database including a search listing associated with the advertisement, in response to the request for advertising from the advertiser, the search listing being associated with the search word;
(e)	receiving a search request from a user, the search request including the search word;
(f)	identifying the search listing associated with the search word in response to the search request from the user, thereby placing the search listing in accordance with a predetermined advertising rule;
(g)	assessing actual cost for the advertisement based, at least in part, upon a number of actual clicks on the search listing in accordance with a predetermined rule;
(h)	updating account information of the advertiser based, at least in part, upon the actual cost;
(i)	**if the actual cost exceeds the predicted expense, providing the advertiser with a free advertising period during the remaining time period of the first advertising period without charging beyond the predicted expense, the free advertising period being a period of time in which advertisements are served but the advertiser's account for the advertisement is depleted.**

Applicant has argued that Cheung '471 does not teach or suggest the limitations (c) and (i) of claim 21 as shown in the above claim chart. The Examiner argued that Cheung '471

teaches or suggest the limitation (i), but it does not specifically disclose the limitation (c). The Examiner further argues that "it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the Cheung invention to include a fixed-price-contract-style payment plan as discussed in McAfee since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable."

Applicants respectfully traverse as set forth below.

A. MCAFEE REFERENCE DOES NOT TEACH OR SUGGEST LIMITATIONS (c) AND (i) OF THE CLAIMED INVENTION

(1) Applicant respectfully disagrees with the Examiner's characterization of the claimed invention, particularly the limitations (c) and (i) because the claimed invention does not disclose any fixed-price-contract-style payment plan. The Examiner, referring to the McAfee reference, asserted that "'[w]ith a fixed price contract, the payment is simply the firm's bid', Applicant is essentially claiming a fixed price contract, as opposed to the account-limit method of Cheung '471 which reduces the risk of the provider relative to the advertiser." (see Office Action pg. 8)

The fixed price payment plan in the advertising industry charges a fixed amount for a specific advertisement during a specific time period. For example, an Internet advertising service provider may charge an advertiser a monthly fee of $1,000 for keyword advertisements in association with a keyword "camera." In this event, both the Internet advertising service provider and the advertiser take similar risks because the actual cost of advertisement based upon the number of clicks made during the specified time period could be more or less than $1,000.

This is true in the conventional fixed-price-contract disclosed in the McAfee reference. In the McAfee reference, while a bidder (contractor) for the fixed-price-contract takes risks of absorbing extra labor hours, the government also takes risks of losing money when the contractor completes the project at a lower cost than the bid price.

On the other hand, the payment plan disclosed in the limitations (c) and (i) of the claimed invention is not the fixed-price-contract-style payment plan because the Internet advertising service provider charges not a fixed fee but an actual cost for the advertisement up to the account limit.

The concept of the fixed price contract is that both the buyer and seller take the similar risks. As the Examiner indicated in the Office Action, Cheung '471 teaches reducing the risk of the provider relative to the advertiser. A number of accounting methods have been developed by sellers to reduce the risk of the sellers relative to customers. Cheung's invention also follows the line of development to reduce the risk of the sellers relative to customers.

The accounting method of the claimed invention, unlike the accounting method disclosed in Cheung '471 or the fixed-price-contract of McAfee, reduces the risk of the customers (advertisers) relative to the sellers (advertising service providers). As such, neither Cheung '471 nor McAfee nor the combination thereof teaches or suggest the limitations (c) and (i) of the claimed invention.

Further, in the business perspective, the conventional fixed-price-contract-style payment plan as discussed in McAfee is different concepts from the combination of free advertising and an account limit based on the predicted advertising cost of the claimed invention. When a contractor offers a bid price for the fixed-price-contract-style payment plan, the contractor calculates the bid price based on predicted amount of material and labor for a project. Since the

contractor can manage and control their labor, it would be reasonable business risks to absorb extra labor hours or the like.

However, when the service provider provides the predicted advertising cost of the claimed invention, they calculate the predicted advertising cost based upon internet users' click pattern in the past. However, the service provider cannot control or manage the users' click pattern. The predicted advertising cost is just helpful information for the advertisers (buyer) to set up the deposit amount. In allowing the advertiser to set up the predicted advertising cost as the account limit and providing free advertising after the actual cost meets the predicted advertising cost, the Internet service provider should take potentially significant risks. These risks of the Internet service provider cannot be compared to the reasonable business risks in the conventional fixed-price-contract-style payment plan disclosed in the McAfee reference. At best, the conventional fixed-price-contract-style payment plan in the McAfee reference is nothing but an invitation to experiment with a direction on how to solve the problem of unexpectedly sharp increase of the advertising cost. There is simply no direction in Cheung '471 or the McAfee reference to the present invention. The only direction is through the application of forbidden hindsight.

(2) It is respectfully pointed out that the Examiner's assumption and comparison are not proper.

The Examiner takes official notice (See Office Action p. 6) as follows:

> Further it is old and well known in the business arts that **when a bidding business miscalculates or misquotes a project, that the business must absorb any extra expense in favor of retaining the future business of the customer and generating good will**. For example, when contractor will absorb that cost (i.e. provide free labor). Of course the

> contractor has the option to bill for the extra time as well, but it is more common in such a situation for the contractor to instead inform the customer that the contractor absorbed the extra hours to create good faith and pave the way for repeat patronage.

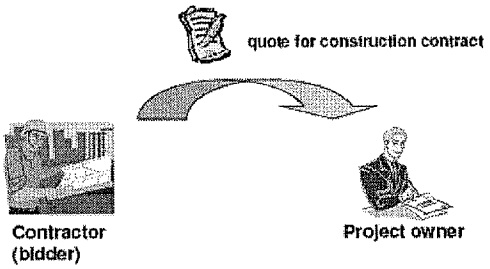
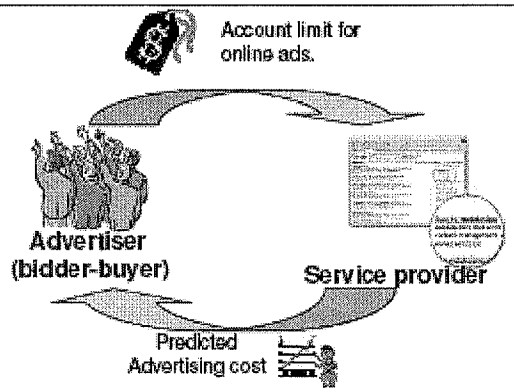
In the online advertising account disclosed both in Cheung '471 and the present invention, unlike the above example in the construction bidding or quoting, the advertising service provider does not "miscalculate or misquote" an advertising cost because the service provider only predicts the advertising cost based upon its previous statistics.

The amended claims 21 and 35 of the present invention recite:

> ... **upon receipt of a request for advertising from the advertiser, setting up the predicted expense as an account limit for the first advertising period**;
> maintaining a search information database including a search listing associated with the advertisement, in response to the request for advertising from the advertiser, the search listing being associated with the search word;
> receiving a search request from a user, the search request including the search word;
> identifying the search listing associated with the search word in response to the search request from the user, thereby placing the search listing in accordance with a predetermined advertising rule;
> assessing actual cost for the advertisement based, at least in part, upon a number of actual clicks on the search listing in accordance with a predetermined rule;
> updating account information of the advertiser based, at least in part, upon the actual cost; and
> **if the actual cost exceeds the predicted expense, providing the advertiser with a free advertising period during the remaining time period of the first advertising period without charging beyond the predicted expense, the free advertising period being a period of time in which advertisings are served but the advertiser's account for the advertisement is depleted.**

The Examiner's characterization of the bidding for construction contract is not correct. The Office Action notes that "when contractors provide bids[1] or quotes for a project, they estimate their labor cost. If the project ultimately requires more labor hours than the contractor anticipated, the contractor has the option to bill for the extra time as well, but it is more common in such a situation for the contractor to instead inform the customer that the contractor absorbed the extra hours to create good faith and pave the way for repeat patronage." Contrary to the Examiner's charaterization, however, in the general contract bidding, the contractor woud not be able to charge more than an accepted bidding price once the buyer (project owner) accepts the bidding because the construction contract is agreed upon the bidding price. The contractor could absorb the extra labors if it merely provided "quotes" (not bid) for a project. The contractor's presented quotes, unlike the accepted bidding committed by the contractor, would not be legally binding unless both parties enter an agreement based upon the quoted price. Whereas, the account limit of the claimed invention is set by the buyer (advertiser) based upon the predicted advertising cost provided by the service provider. In the present invention, the service provider who projects the predicted cost is not a bidder. Further, the predicted advertising cost is different from the quotes for a project. The predicted advertising cost is merely information based on the past experience provided by the service provider whereas the quotes are generally calculated based on the current conditions and terms of the project.

[1] As we discussed above, the term "bidding" is misused because the bidder is not able to change the accepted bid price whereas the quoted price is not a legally binding price.

Examiner's Example	Present Invention
	

In the Examiner's example of construction, the contractor calculates the quotes based on known material prices and predicted labor hours. **Since the contractor can control and manage their own labor hours, it would be fair for the contractor to absorb the extra labor hours. On the other hand, the service provider in the present invention cannot control clicks made by internet users. The service provider calculates the predicted advertising cost based upon volume of the advertising in the previous time period.** Thus, absorbing over-delivery of the advertisements is not reasonable business risks because the service provider cannot control the volume of the advertising. Further, the quotes offerred by the contractor is a proposal whereas the predicted advertising cost is only helpful information based on the past business experience.

B. CHEUNG '471 TEACHES AWAY THE CLAIMED INVENTION

Even assuming, for the sake of argument, that the Examiner's official notice on the quotes for construction and absorbing extra labor hours, Cheung '471 teaches away providing the

advertiser with a free advertising period after an actual cost of advertisement exceeds the predicted expense.

At the Interview of November 20, 2008, Examiner asserted that a reference would teach away only if the cited reference makes the claimed invention inoperable.

This is not a correct statement because "a reference may be said to teach away when a person of ordinary skill, upon reading the reference, **would be discouraged from following the path set forth in the reference, or** would be led in a direction divergent from the path that was taken by the applicant ... [or] if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the device." The Federal Circuit also held that "in general, reference will teach away if it suggest that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." In re Gurley, 27 F.3d 551 (Fed. Cir. 1994).

It is well settled law that a reference would teach away if a person of ordinary skill, upon reading the reference, is discouraged from following the path set forth in the reference. Applicant previously presented Federal Circuit's precedents on the issue of "teaching away." There is no motivation to combine if a reference teaches away from its combination with another source. Tec Air., Inc. v. Denso Mfg. Michigan Inc., 192 F.3d 1353, 1360 (Fed. Cir. 1999). "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set forth in the reference, or would be led in a direction divergent from the path that was taken by the applicant ... [or] if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the device." Id. (quoting In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994)).

For example, column 4, lines 12-27 of Cheung '471 recites:

> The search engine provider may maintain accounts for each advertiser, also called a web site promoter. **Because large numbers of charges may accrue for an account in a short period of time, maintaining an accurate and up-to-date account database is not only important, but can be invaluable. Existing account monitoring methods often result in advertisements being over-delivered and the advertiser's account being overcharged**. Since advertisers may have established predetermined limits for certain charges, the search provider may not be reimbursed for the services provided to the advertiser beyond the advertiser's predetermined limit. Further, competing advertisers, which are paying for chargeable events after a competitor's limit has been reached, may be unnecessarily spending money for participation or priority placement in the search result listings if the non-paying advertiser's listing is still considered active.

The Examiner asserts that Cheung '471 presents the option of awarding free advertising verses not awarding them. Contrary to the Examiner's findings, Cheung '471 excludes and discourages the option of awarding free advertising. Cheung '471 clearly express its purpose as maintaining an accurate account database and avoiding **over-delivery of advertisement** after it reaches account limits established by the advertiser.

Likewise, Cheung '471 discourages a person of ordinary skill, upon reading the reference, from awarding free advertising. As such, Cheung '471 teaches away expressly from its combination with a concept of "free advertising."

C. MCAFEE REFERENCE IS NON-ANALOGOUS ART

Examiner applies the McAfee reference against the claimed invention. However, **the claims at issue are improperly rejected over Cheung '471 and the McAfee reference because the McAfee reference is non-analogous art.**

"A prerequisite to making this finding is determining what is prior art, in order to consider whether the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). The Federal Circuit has adopted a two step test for determining whether particular references are within the appropriate scope of the art. *In re Deminksi,* 796 F.2d 436 (Fed. Cir. 1986). The first part of the test is a determination of whether the reference is **within the field of the inventor's endeavor**. *Id.* at 442. Second, assuming the reference is outside that field, then it must be determined whether the reference is **reasonably pertinent to the particular problem with which the inventor was involved.** *Id.*

(a) whether the art is from the same field of endeavor

In *In re Clay*, the Examiner and the Board of Patent Appeals and Interferences rejected Clay's invention as being unpatentable under 35 U.S.C. 103(a) over Hetherington and Sydansk references. However, the Federal Circuit held that the Sydansk reference is not analogous.

The Clay's invention was a process for storing refined liquid hydrocarbon product in a storage tank having a dead volume between the tank bottom and its outlet port. The claimed process involved preparing a gelation solution which gels after it is placed in the tank's dead volume; the gel can easily be removed by adding to the tank a gel-degrading agent such as hydrogen peroxide. The Sydansk reference (U.S. Patent 4,683,949) discloses a process for reducing the permeability of hydrocarbon-bearing formations and thus improving oil production, using a gel similar to that in Clay's invention. *Id.* at 658.

The Federal Circuit found that the Sydansk reference "cannot be considered to be within Clay's field of endeavor **merely because both relate to the petroleum industry**." *Id.*

(**Emphasis added**). The court further noted that "Clay's field of endeavor is the *storage* of refined liquid hydrocarbons. The field of endeavor of Sydansk's invention, on the other hand, is the *extraction* of crude petroleum." *Id.* at 659.

Likewise, **the McAfee reference CANNOT be considered to be within Applicant's field of endeavor.** The McAfee reference discloses a bidding process for *government contracts*, such as construction contracts, whereas the claimed invention involves management of *online advertisement* accounts.

(b) whether the reference is reasonably pertinent to the particular problem with which the inventor was involved

"A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve. If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection. An inventor may well have been motivated to consider the reference when making his invention. If it is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it." *Id.* at 659.

> [In *In re Clay*,] Sydansk's gel treatment of underground formations functions to fill anomalies so as to improve flow profiles and sweep efficiencies of injection and production fluids through a formation, while Clay's gel functions to displace liquid product from the dead volume of a storage tank. Sydansk is concerned with plugging formation anomalies so that fluid is subsequently diverted by the gel into the formation matrix, thereby forcing

> bypassed oil contained in the matrix toward a production well. Sydansk is faced with the problem of recovering oil from rock, *i.e.*, from a matrix which is porous, permeable sedimentary rock of a subterranean formation where water has channeled through formation anomalies and bypassed oil present in the matrix. *Id.*

The Federal Circuit held that Sydansk's problem of recovering oil from rock is not reasonably pertinent to the particular problem with which Clay was involved-preventing loss of stored product to tank dead volume while preventing contamination of such product. *Id.* The Federal Circuit further noted that the subterranean formation of Sydansk is not structurally similar to, does not operate under the same temperature and pressure as, and does not function like Clay's storage tanks. *Id.*

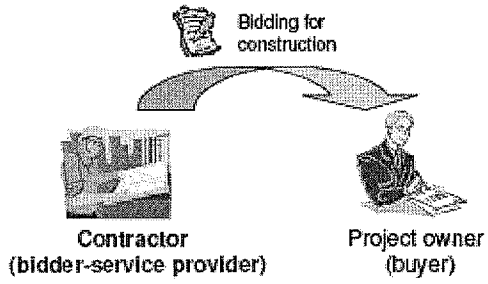
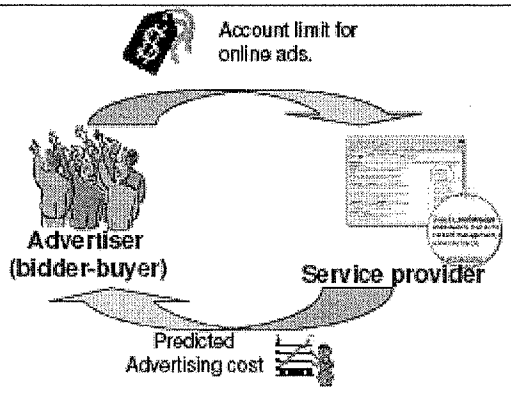
Likewise, **the McAfee's problem is NOT reasonably pertinent to the particular problem with which the present invention is involved.**

The account limit of the present invention and the bid price of the McAfee reference have totally different concepts.

First, the problem to be solved by the present invention has nothing to do with the bidding process. The present invention allows the advertiser (buyer) to set up the predicted expense as an account limit for a first advertising period. If the actual cost exceeds the predicted expense, the claimed invention provides the advertiser with a free advertising period during the remaining time period of the first advertising period without charging beyond the predicted expense, the free advertising period being a period of time in which advertisements are served but the advertiser's account for the advertisement is depleted. Neither the predicted expense nor the account limit is related to a bidding process.

Second, the construction bidding is committed by a service provider whereas the account limit of the claimed invention is set up by an advertiser (buyer). The McAfee reference discloses

a construction bidding process. The construction bidding process is the process of submitting a proposal to carry out a described construction project for an agreed price. The construction bidding is committed by a contractor (service provider), not by a buyer. Bids by contractors for the total cost of construction are submitted to a project owner or developer (buyer) who then makes decisions based on price, contractor qualifications, and other factors. Upon acceptace by the developer (buyer), the contractor (service provider) has a legal duty of performing the project for the agreed price (bid price). The account limit disclosed by the claimed invention, on the other hand, is a deposit money the advertiser (buyer) is willing to pay for the advertising service. Thus, the account set-up of the claimed invention is committed by an advertiser (buyer) who is willing to buy advertising services from a service provider. A account limit is the highest price that a buyer (i.e., bidder) is willing to pay for advertising services.

McAfee Reference	Present Invention
	

The claimed invention is to solve the problem of unexpectedly sharp increase in online advertising cost for which the advertiser (bidder) bidded relying on the predicted cost information projected by the service provider. The McAfee reference, on the other hand, is to solve the problem of risks and moral hazards in the process of bidding for government contracts.

As such, the McAfee's problem of *risks and moral hazards in the process of bidding for government contracts* is not reasonably pertinent to the particular problem with which the present invention is involved-*preventing unexpectedly sharp increase in online advertising cost* for which the advertiser has bidded relying on the predicted cost information projected by the service provider.

A person having ordinary skill in the art would not reasonably have expected to solve the problem of unexpectedly sharp increase in online advertising cost for which the advertiser has bidded relying on the predicted cost information projected by the service provider by considering the McAfee reference dealing with bidding for government contracts or construction contracts.

Therefore, claim 21 is now in condition for allowance.

Claim 35

Since claim 35 recites similar limitations with those of claim 21, the above remarks are equally applicable for claim 35. As such, claim 35 is in allowable condition.

Claim 22

Claim 22 depends from independent claim 21 and, as such, are in allowable condition since claim 21 is clearly allowable over the cited prior art.

Claim 23

Claim 23 recites the limitation of "setting a number of expected clicks (Y') by the regression, as Y'=b*m^X or Y'=m · X+b, wherein X is a date; and determining m and b, variable factors of the regression, by using the statistical information."

The Examiner asserted in the Office Action and at the Interview that implementation of a software counting mechanism as is well known in the art and the Examiner is aware of many patents that teach predicting cost or clicks.

Unlike the Examiner's findings, Cheung '471 does not disclose the limitations of setting a number of expected clicks (Y') by the regression, as Y'=b*m^X or Y'=m · X+b, wherein X is a date; and determining m and b, variable factors of the regression, by using the statistical information. Mere statements that "technology is well known in the art" or "the predictions may be calculated using a number of different algorithms known in the art" are not enough to teach or suggest the claimed limitations. Further, the Examiner's indication of his own knowledge for existence of the prior art without citing a specific reference does not meet a prima facie case of obviousness.

Moreover, claim 23 depends from independent claim 21 and, as such, are in allowable condition since claim 21 is clearly allowable over the cited prior art.

Claims 24

Claim 24 recites the limitation of "the number of expected clicks (Y') is set by further considering information on a number of impressions during a particular period or information on a number of season-oriented clicks." The Examiner asserts that this limitation is obvious over Cheung '471. However, Cheung '471 including column 24, line 44-52 does not teach or suggest the above limitation, particularly the number of season-oriented clicks. The Examiner's own knowledge or own modification of the prior art reference in light of his own hindsight would not meet a prima facie case of obviousness. Further, claim 23 depends from dependent claim 22

and, as such, are in allowable condition since claim 22 is clearly allowable over the cited prior art.

Claim 25

Claim 25 recites the limitation of "setting the number of expected clicks (Y') as Y'=(b*(m1^X1)*(m2^X2)*...(mn^Xn)) or Y'=(m1·X1)+(m2·X2)+...(mn·Xn)+b, and wherein the X1, X2, ... is input of time series data of the number of impressions or the number of season-oriented clicks."

The Examiner asserted in the Office Action and at the Interview that implementation of a software counting mechanism as is well known in the art and the Examiner is aware of many patents that teach predicting cost or clicks.

Unlike the Examiner's findings, Cheung '471 does not disclose the limitations. Mere statements that "technology is well known in the art" or "the predictions may be calculated using a number of different algorithms known in the art" are not enough to teach or suggest the claimed limitations. Further, the Examiner's indication of his own knowledge for existence of the prior art without citing a specific reference does not meet a prima facie case of obviousness.

Moreover, claim 25 depends from claim 24 and, as such, are in allowable condition since claim 24 is clearly allowable over the cited prior art.

Claims 26-34

Claims 26-34 depend from independent claim 21 and, as such, are in allowable condition since claim 21 is clearly allowable over the cited prior art.

In light of the aforementioned amendments and discussion, Applicant respectfully submits that the application is now in condition for allowance.

If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding the present amendment, it is respectfully requested that the Examiner please telephone Applicant's undersigned attorney in this regard.

Respectfully submitted,

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